

#### A.3.4 SUN-EARTH CONNECTION THEORY (SECT)

##### 1. Scope of Program

The scientific purview of the SECT program encompasses solar physics; heliospheric physics; magnetospheric physics; and ionospheric, thermospheric, and mesospheric physics. The SECTP supports theory and modeling investigations of the highest scientific quality dealing with problems of fundamental importance within or transcending the boundaries of these individual disciplines. The key characteristics of successful SECTP investigations are that they be of the highest intrinsic scientific quality, and that they also propose to attack problems falling within the Sun-Earth Connection science theme that are of sufficient breadth that their successful completion requires the efforts of a synergistically interacting group of investigators. Proposals that serve only as an umbrella for a variety of separate research tasks, even though they each may be related by a common theme and each of high scientific merit, are not appropriate for the SECTP. Proposals for narrowly focused and/or smaller scope theoretical efforts should be submitted to the individual SEC science discipline program elements described in this appendix. Efforts focused on those particular aspects of the Sun-Earth system that directly affect life and society are not appropriate for the SECT program, and may be submitted to the Living with a Star program. An important characteristic of the SECT program is that it encourages the exploration and development of new areas in the Sun-Earth Connection theme, especially interdisciplinary ones, and, in so doing, may develop objectives for future but as yet undefined space missions.

##### 2. Programmatic Information

Selections for the SECTP are nominally for a three-year period of performance with annual funding allotments contingent upon the submission of satisfactory progress reports and available funding. The most recent SECT selections were carried out under the auspices of the ROSS-2001 NRA, and funding for selected investigations started in Fiscal Year 2002. This program is currently fully subscribed, and the next selection opportunity for the SECT is not expected to be advertised until the ROSS-2004 NRA. Therefore, proposals for this program are not solicited through this current ROSS-2003.

The total budget for this program element in FY 2002 was about \$3.5M, and in the FY 2002-2004 cycle the program is supporting 10 research investigations.

Questions about this program element may be directed to the Discipline Scientists:

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